

FIG. 1  
PRIOR ART

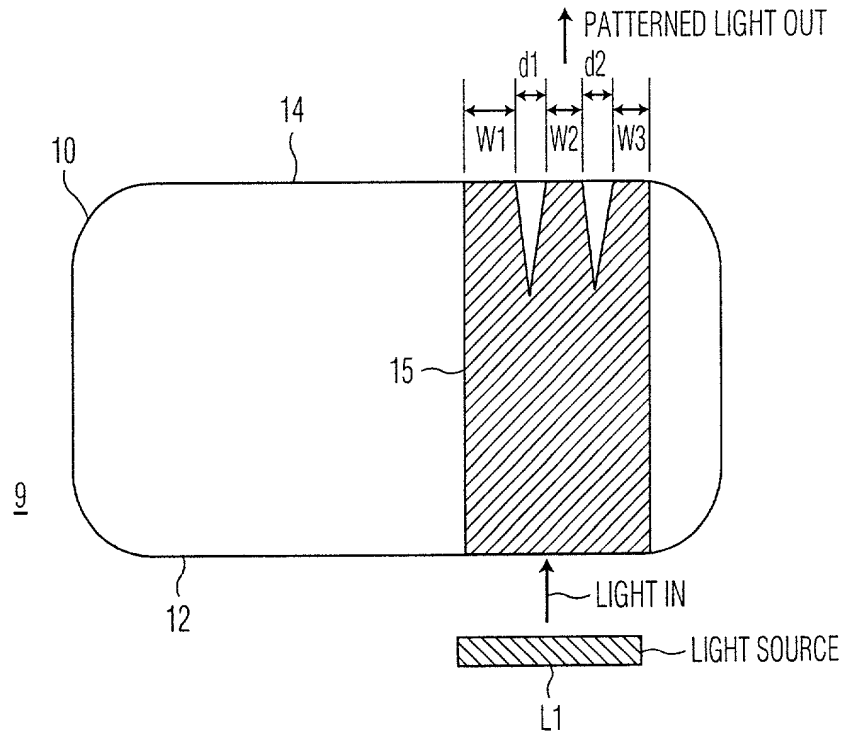


FIG. 2A

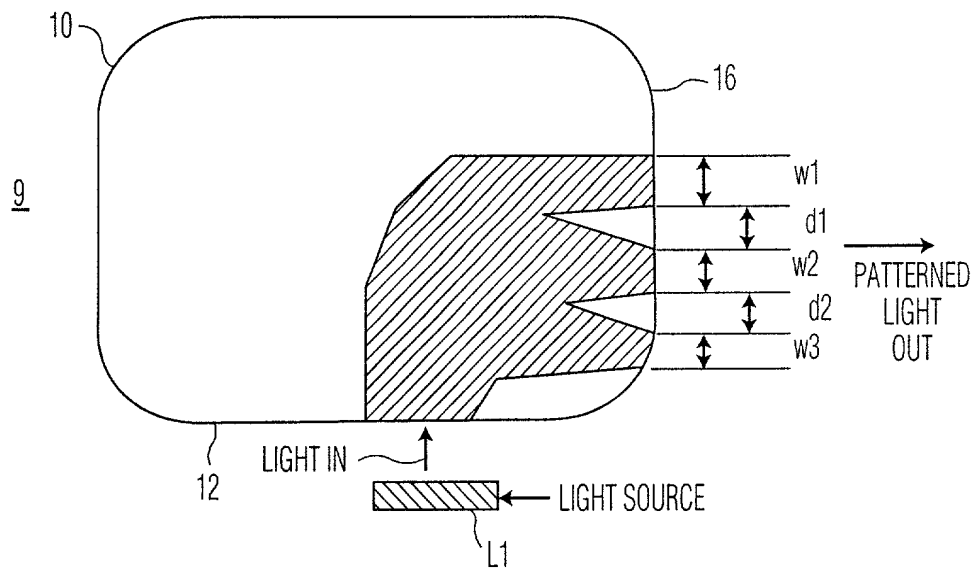


FIG. 2B

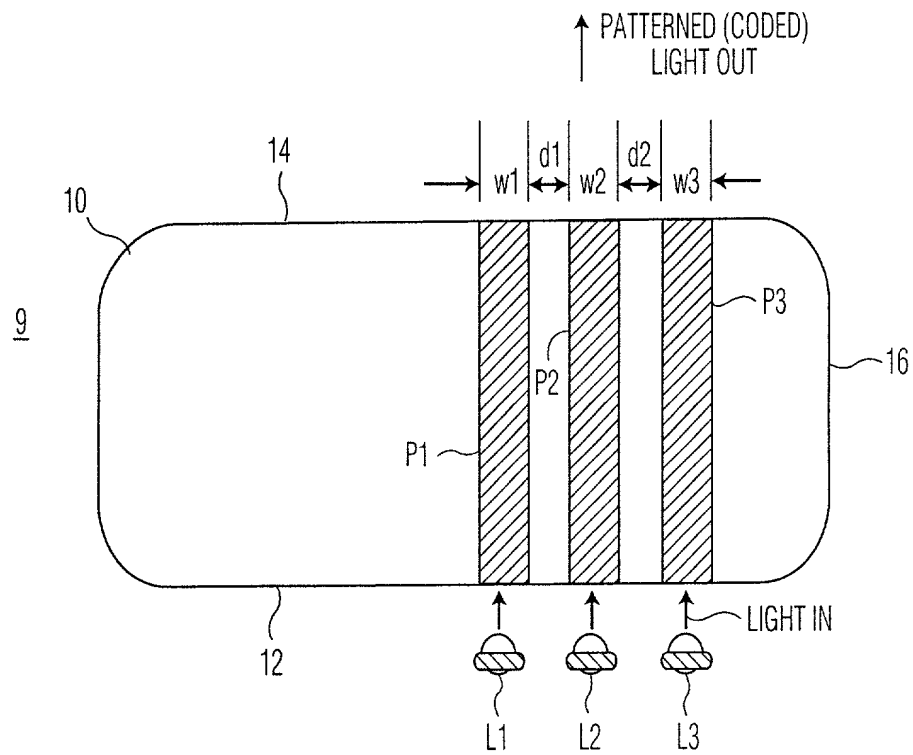


FIG. 2C

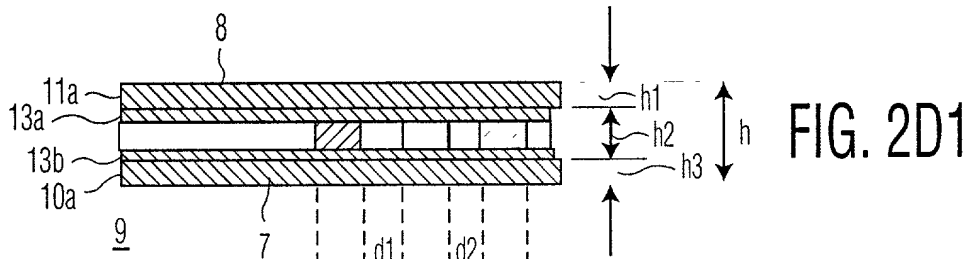


FIG. 2D1

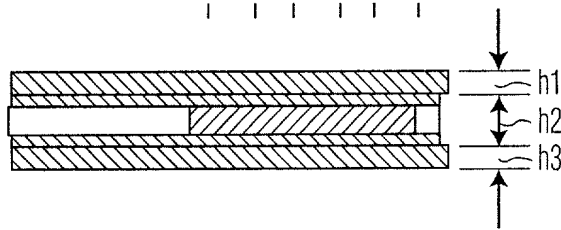


FIG. 2D2

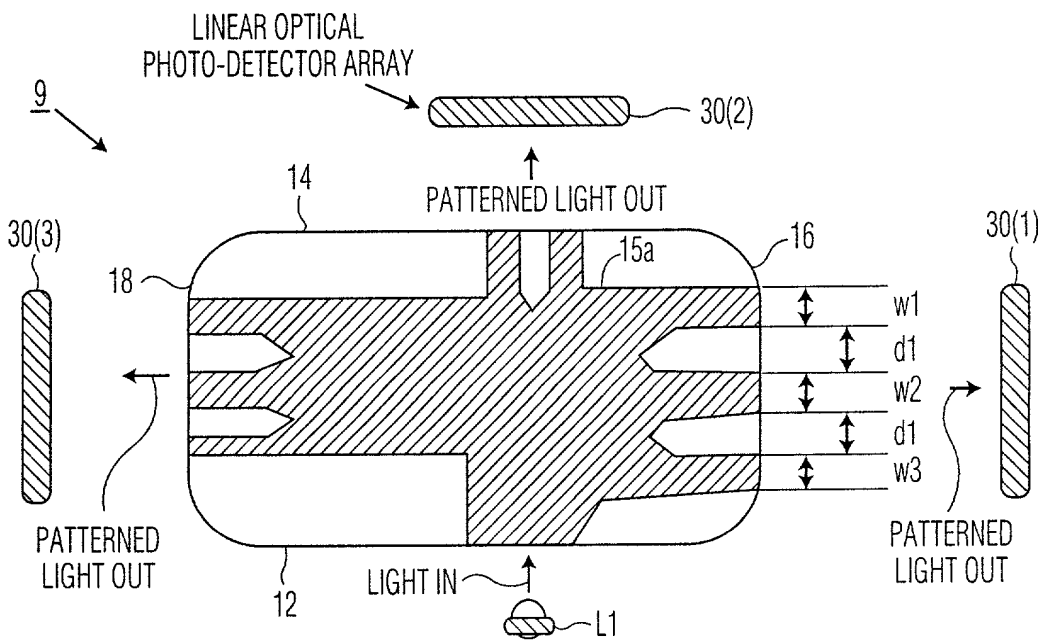


FIG. 3

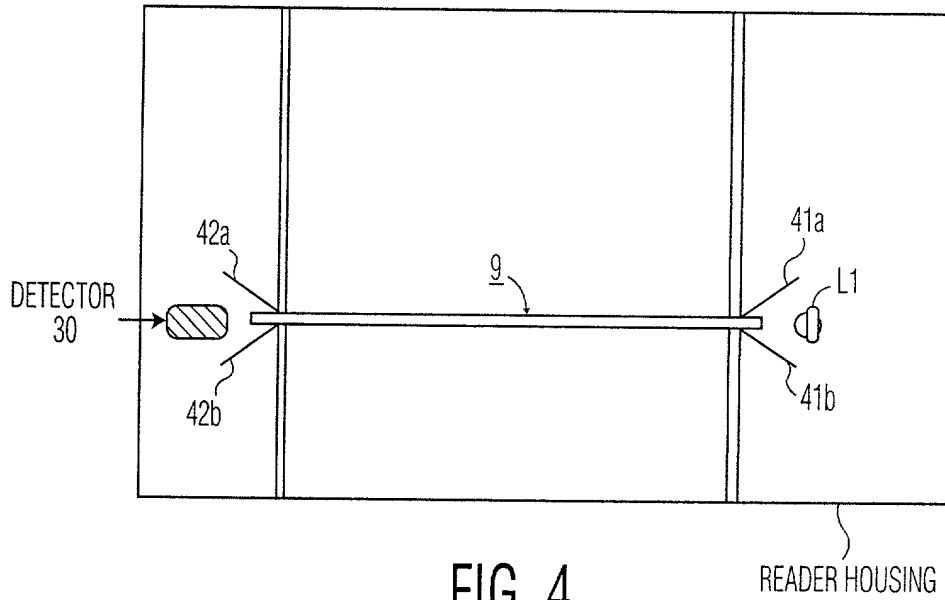


FIG. 4

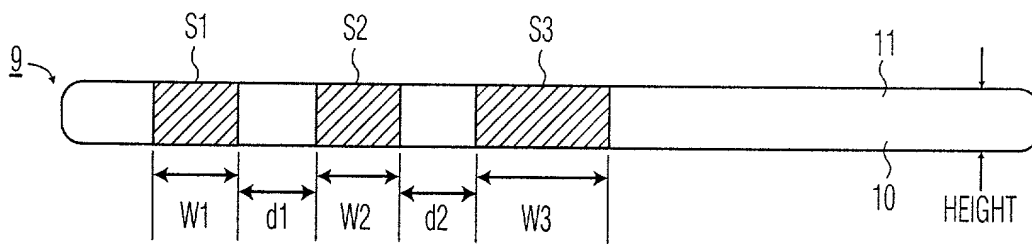


FIG. 5

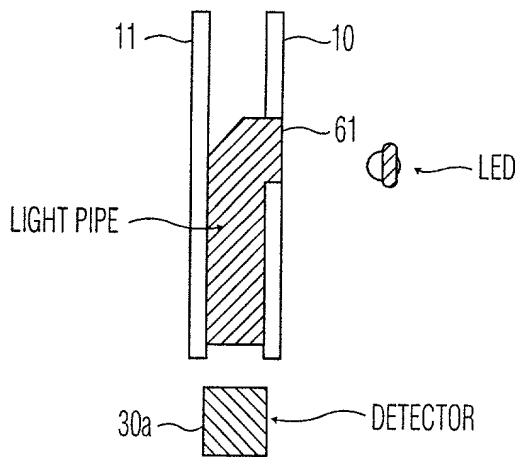


FIG. 6A

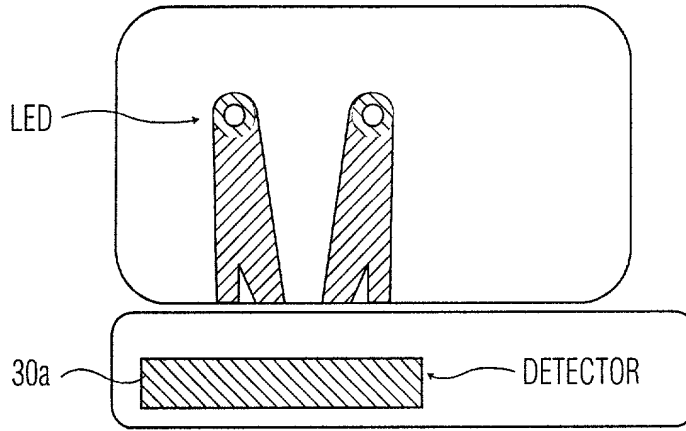


FIG. 6B

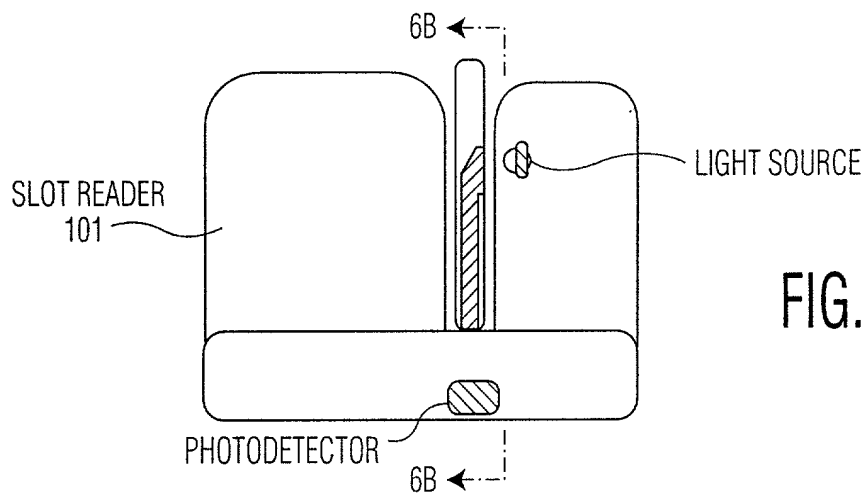


FIG. 6C

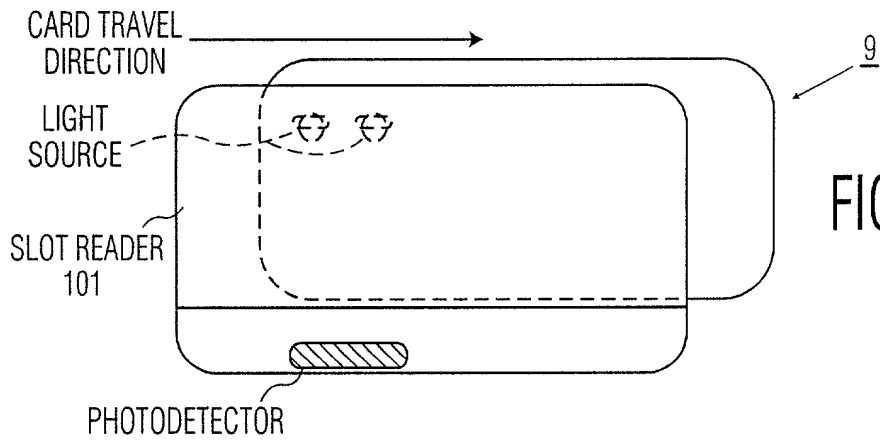


FIG. 6D

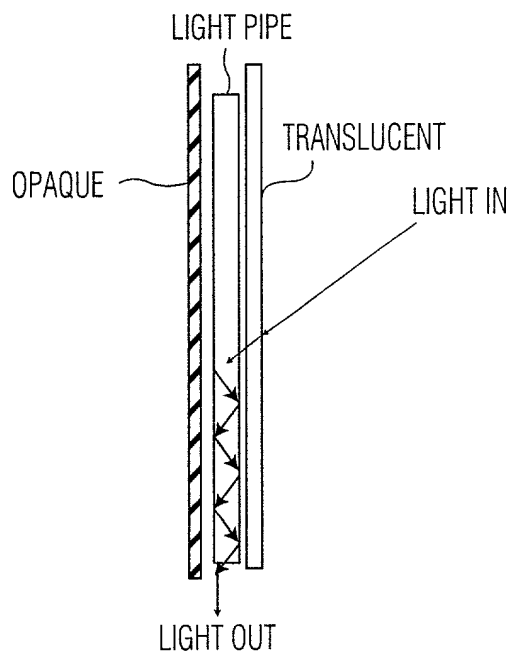


FIG. 6E

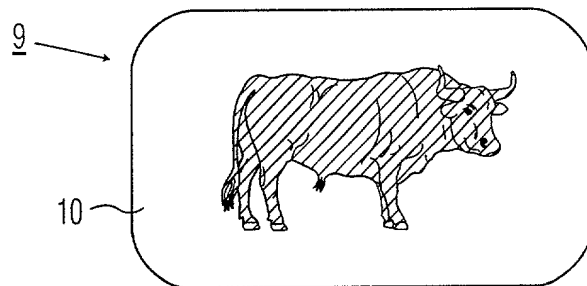


FIG. 7A

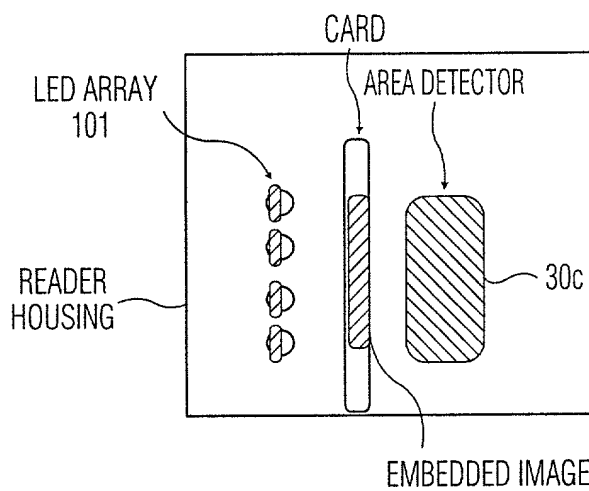


FIG. 7B

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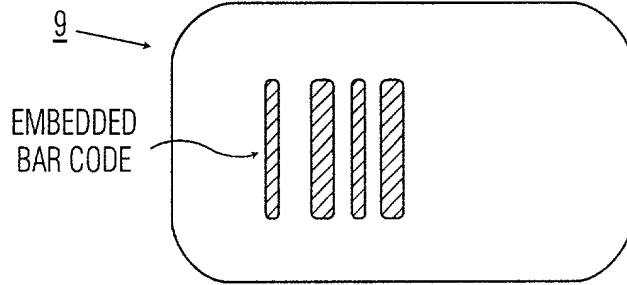


FIG. 8A

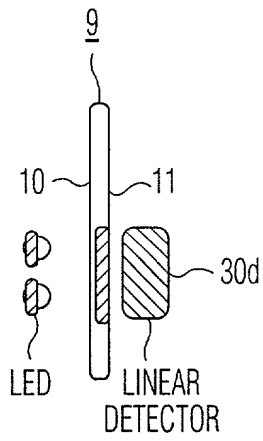


FIG. 8B

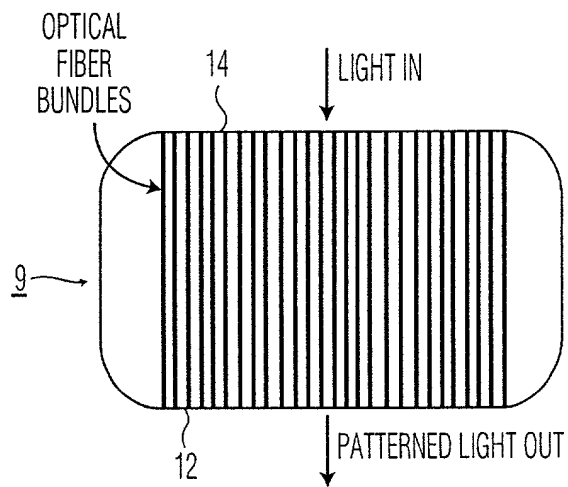


FIG. 9A

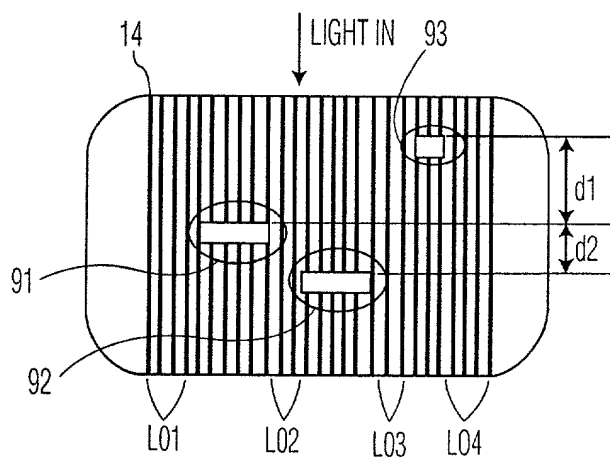


FIG. 9B

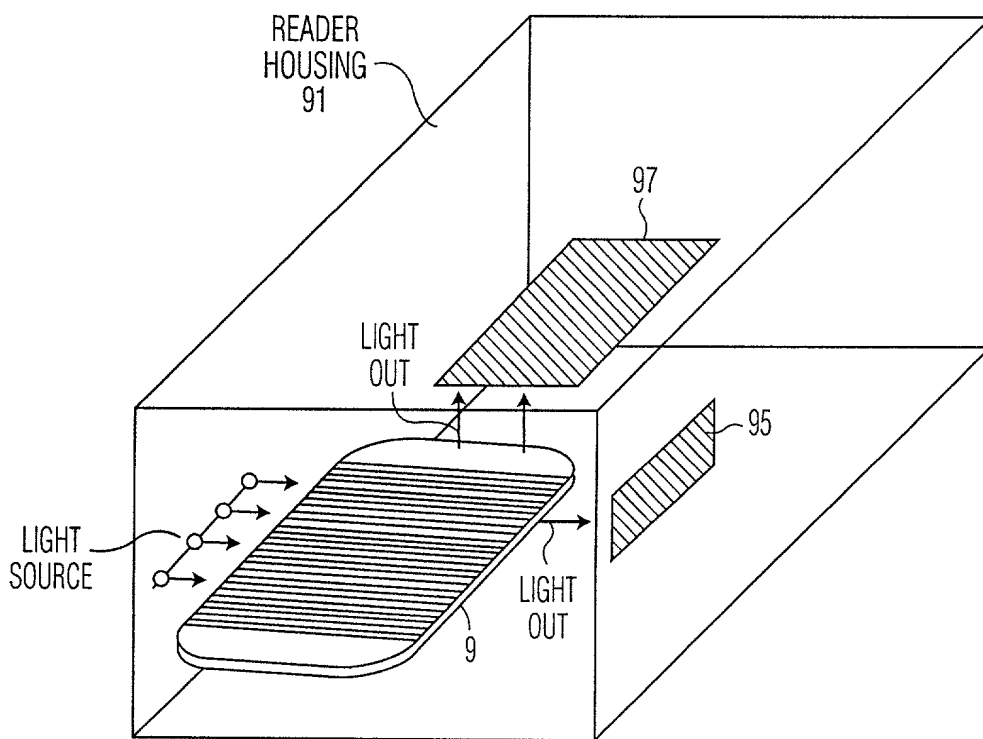


FIG. 9C



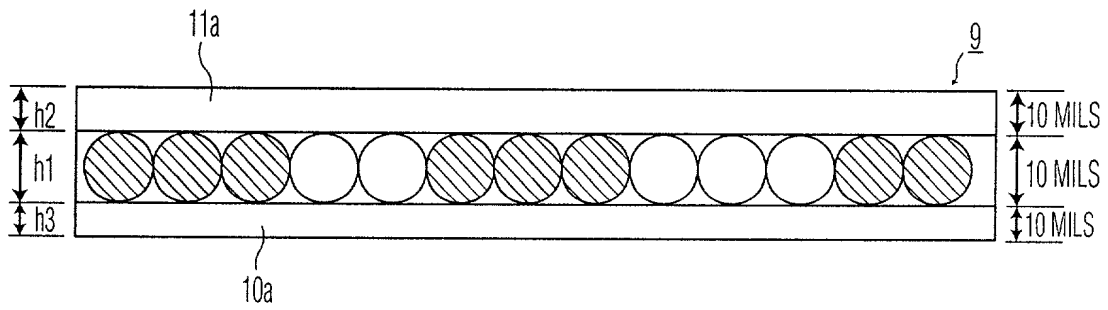


FIG. 9D

RANDOM PLACEMENT OF  
OPTICAL FIBER STRANDS

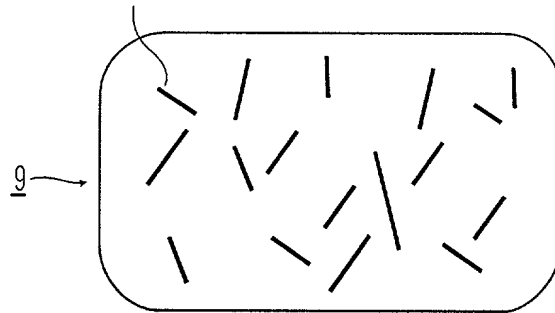


FIG. 10A

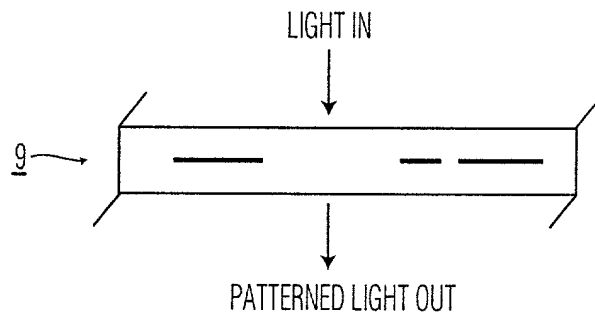


FIG. 10B

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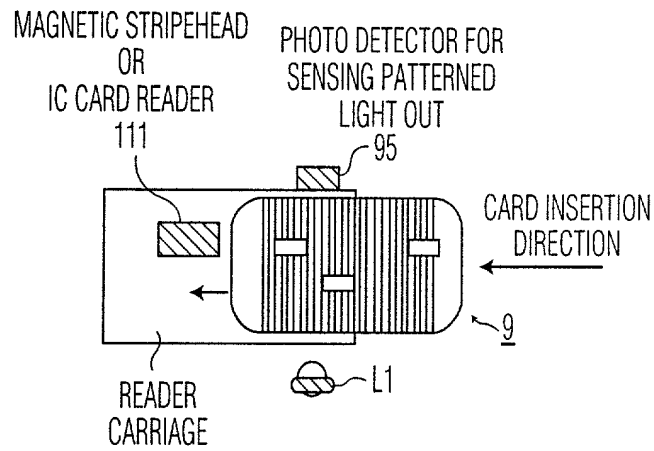


FIG. 11A

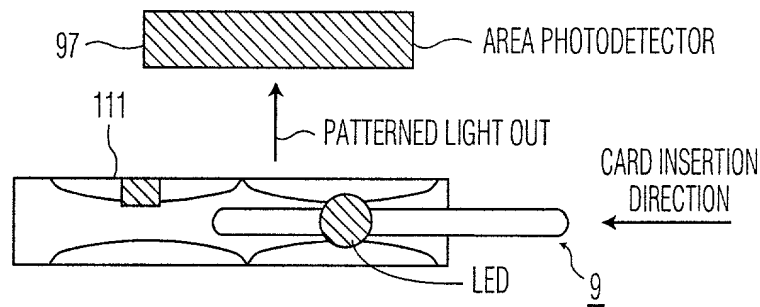


FIG. 11B

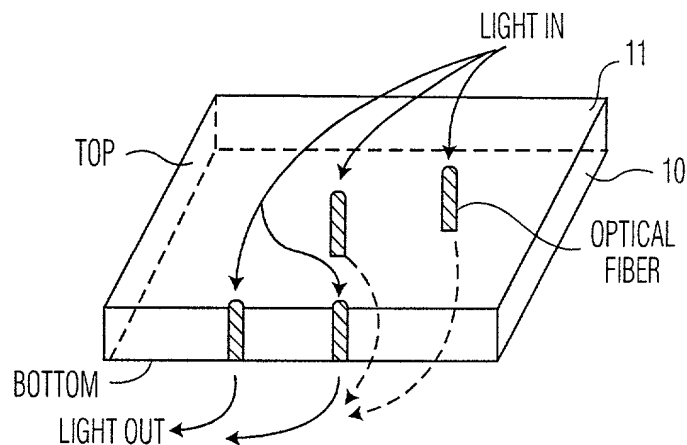


FIG. 12

10/11  
 MAGNETIC STRIPEHEAD  
 OR  
 IC CARD READER  
 111  
 PHOTO DETECTOR FOR  
 SENSING PATTERNED  
 LIGHT OUT  
 95  
 CARD INSERTION  
 DIRECTION  
 9  
 READER  
 CARRIAGE  
 L1  
 FIG. 11A  
 AREA PHOTODETECTOR  
 97  
 111  
 PATTERNED LIGHT OUT  
 LED  
 9  
 CARD INSERTION  
 DIRECTION  
 FIG. 11B  
 LIGHT IN  
 11  
 10  
 OPTICAL  
 FIBER  
 TOP  
 BOTTOM  
 LIGHT OUT  
 FIG. 12

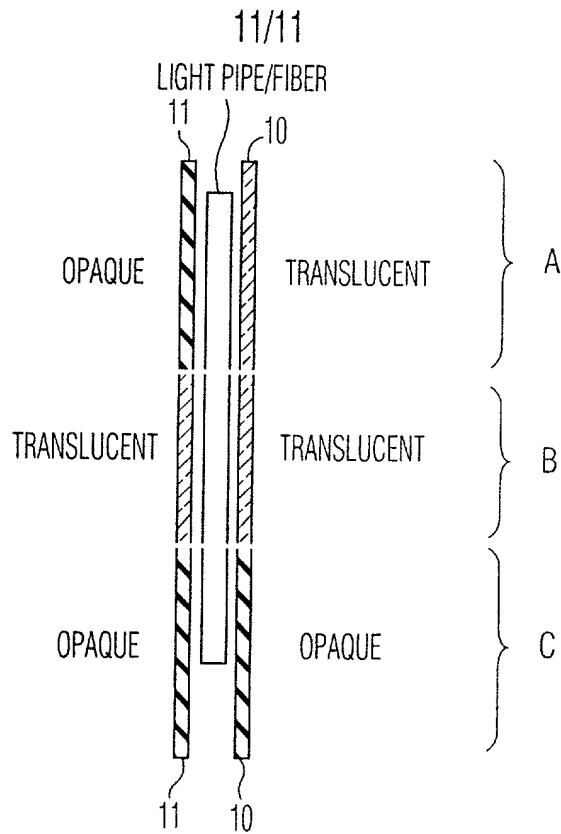


FIG. 13

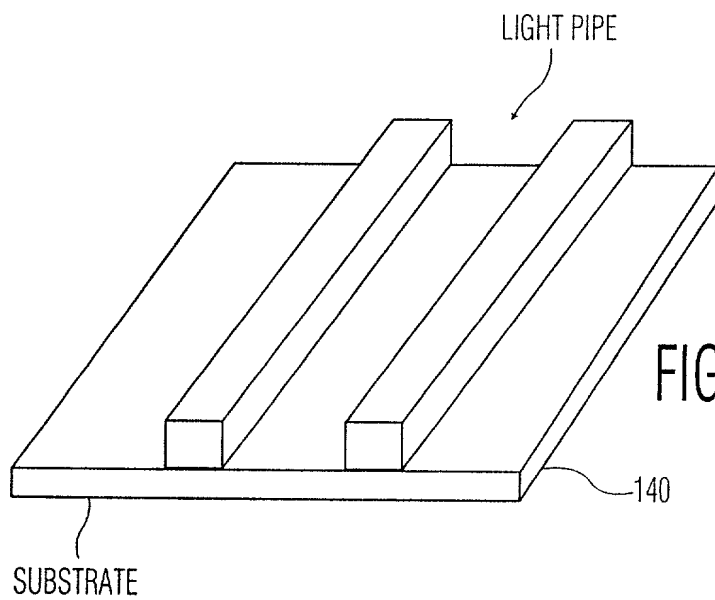


FIG. 14A

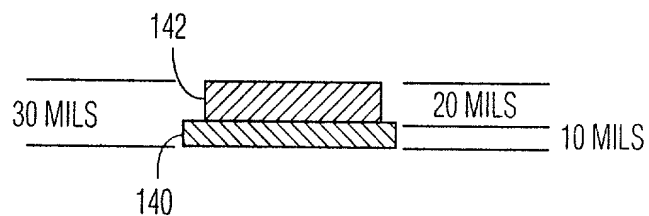


FIG. 14B

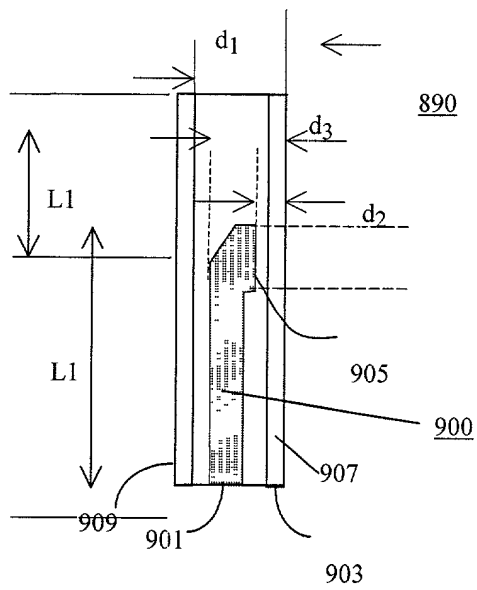


Figure 15

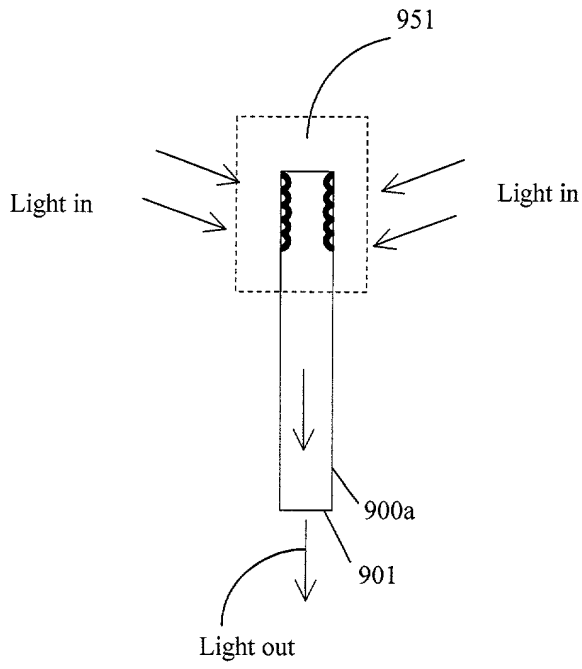


Figure 16A

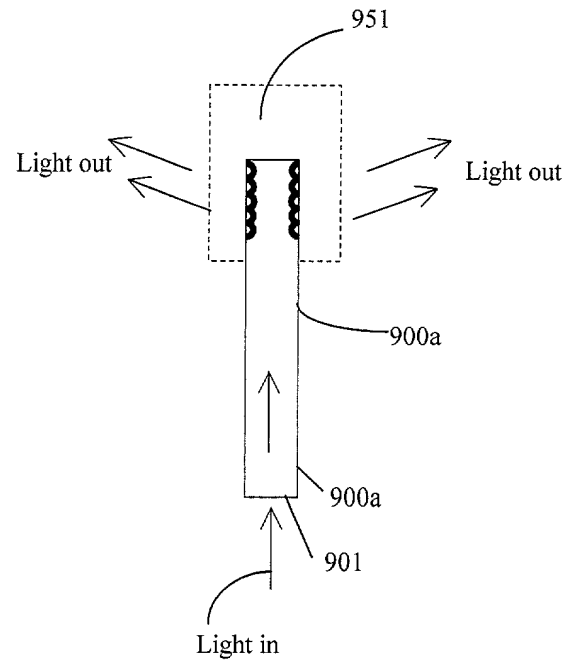


Figure 16B

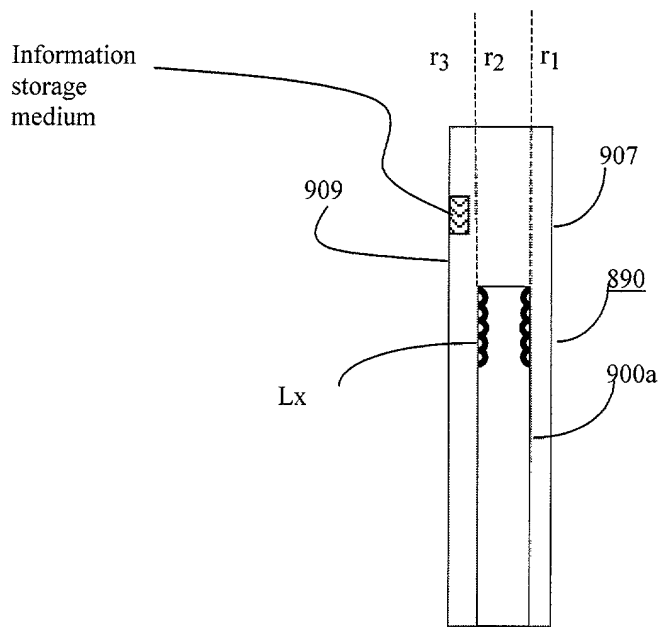


Figure 17A

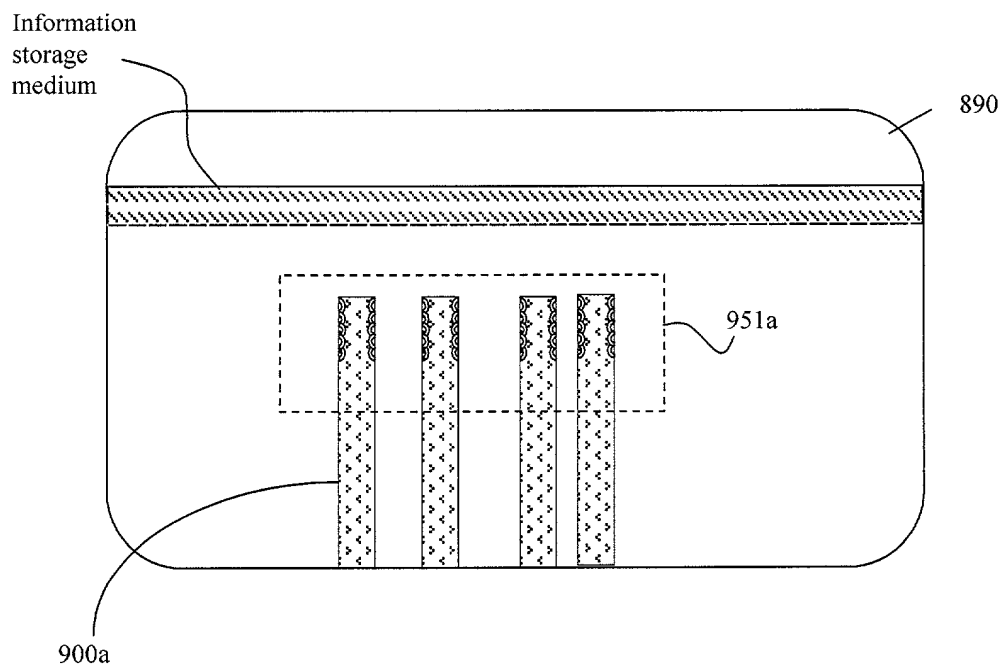


Figure 17B

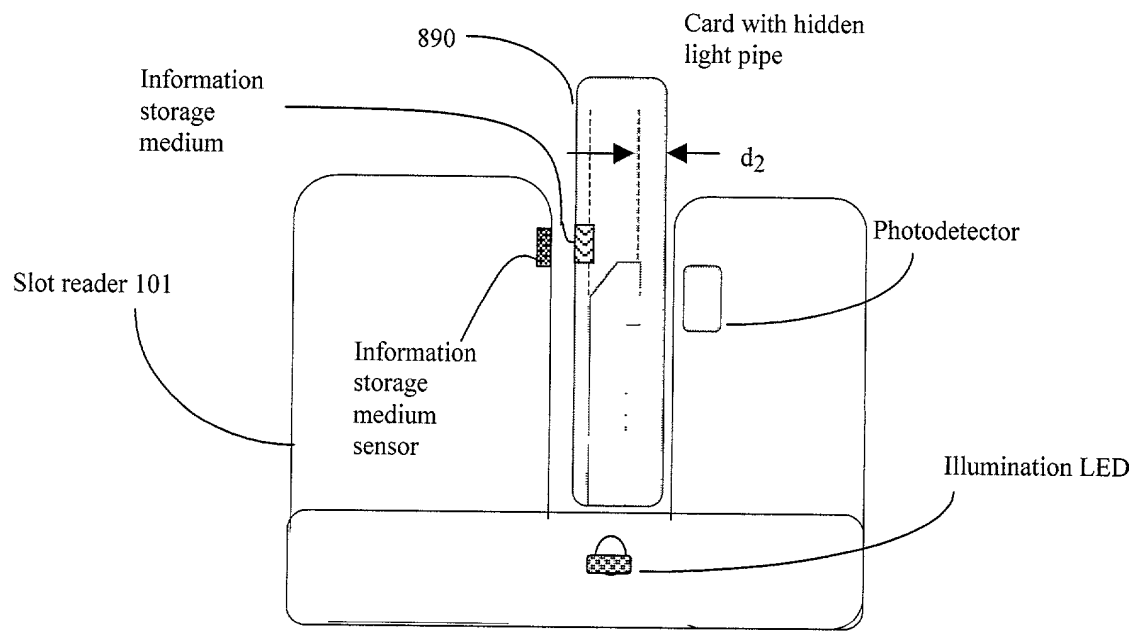


Figure 18A

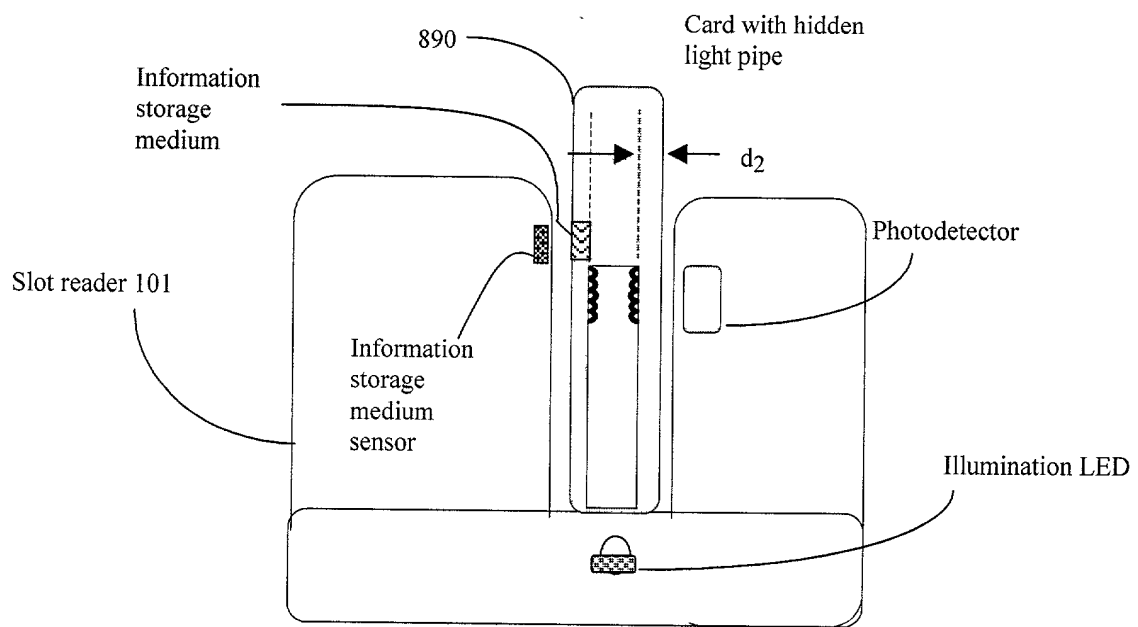


Figure 18B

\*

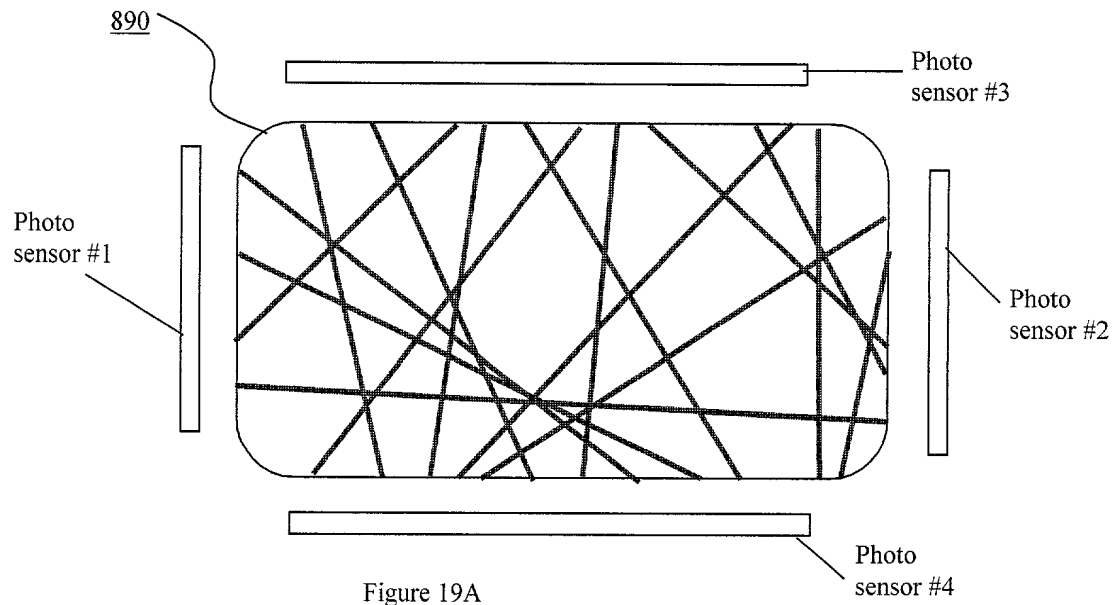


Figure 19A



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\*\*\*\*\*

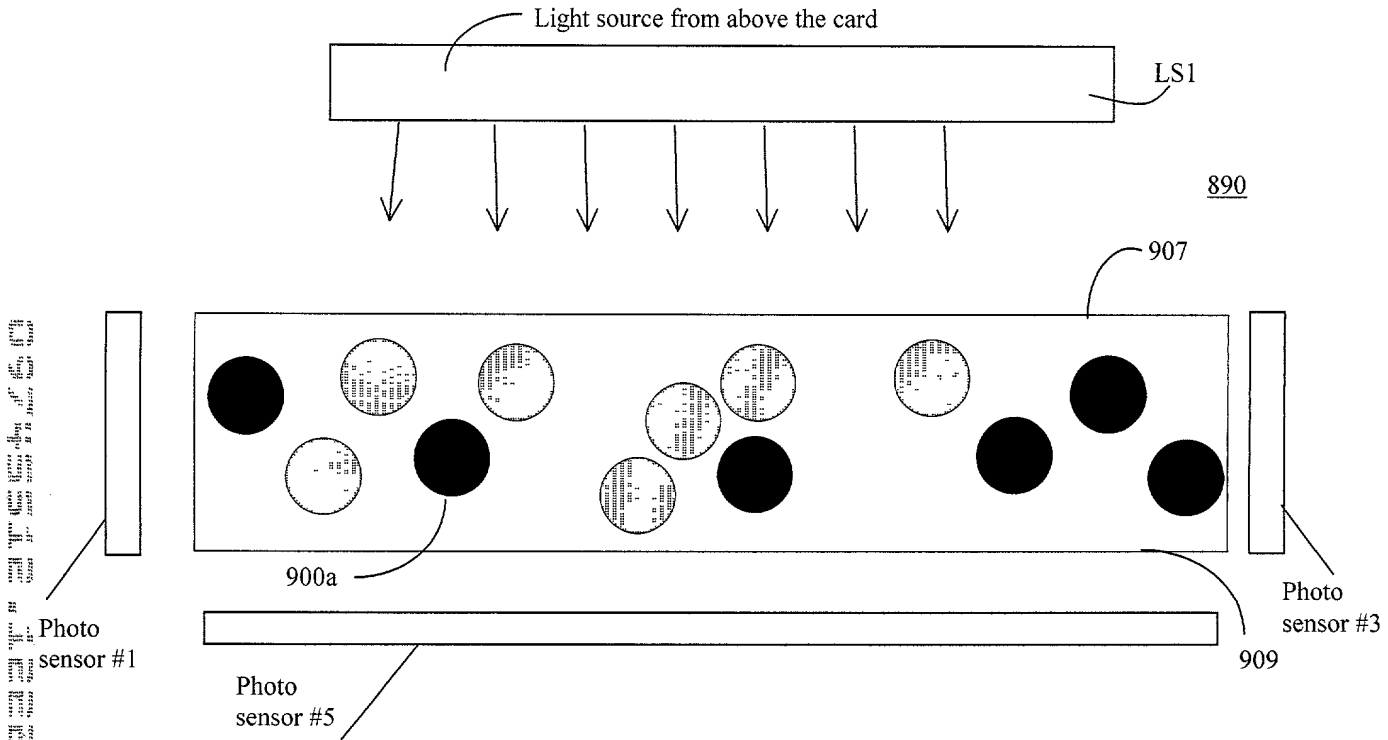


Figure 19B

\*

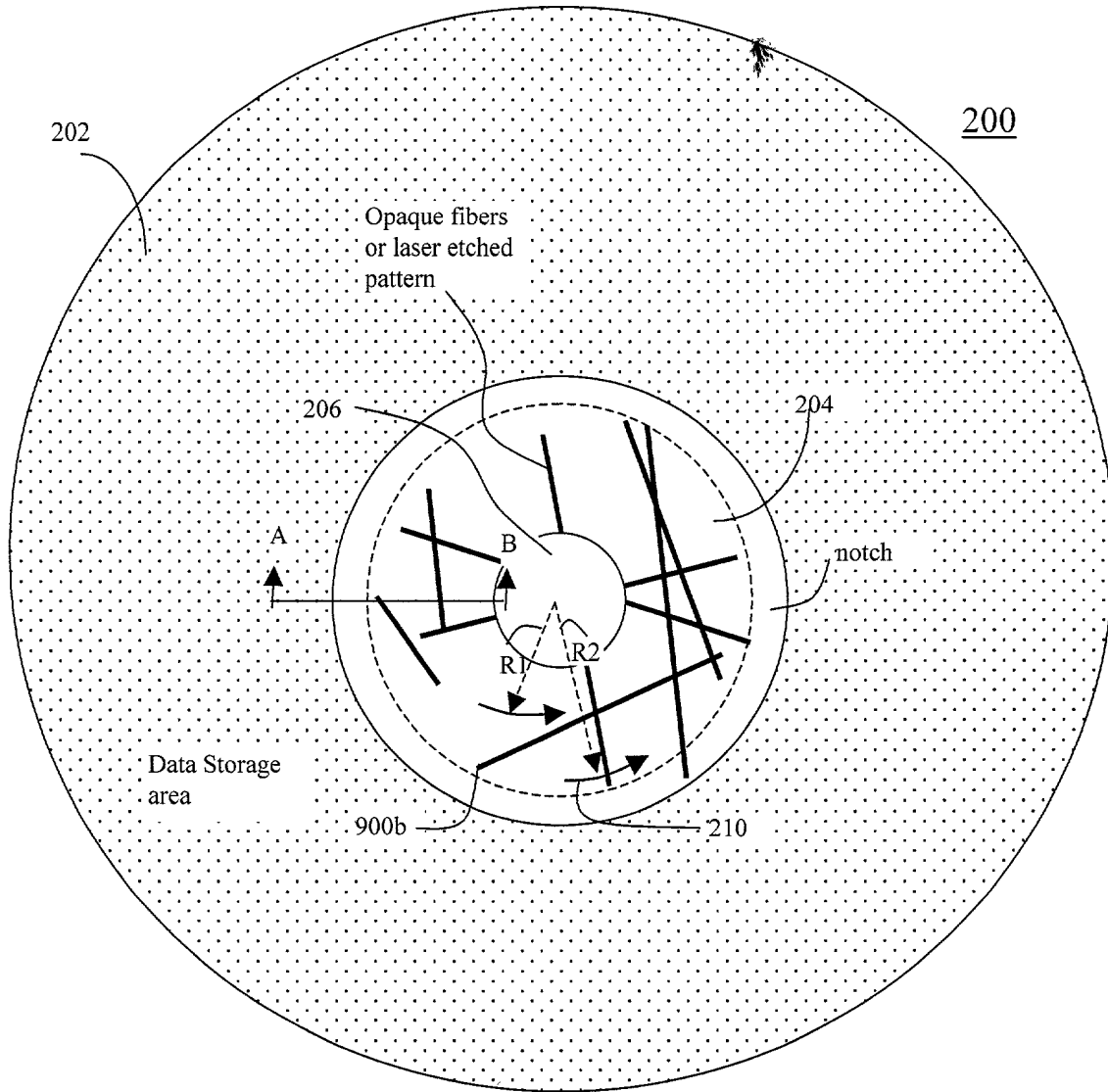


Figure 20A

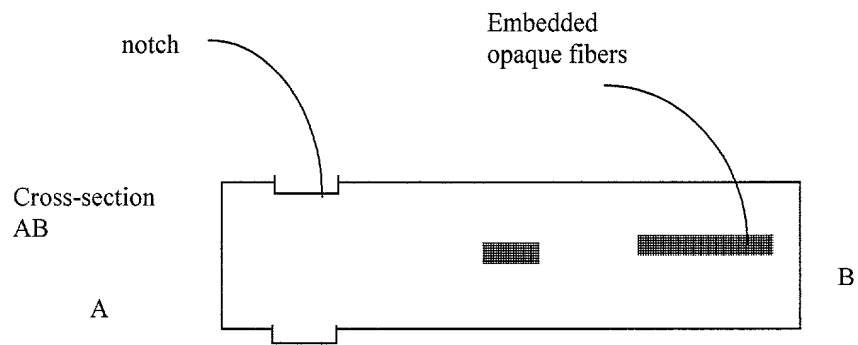


Figure 20B

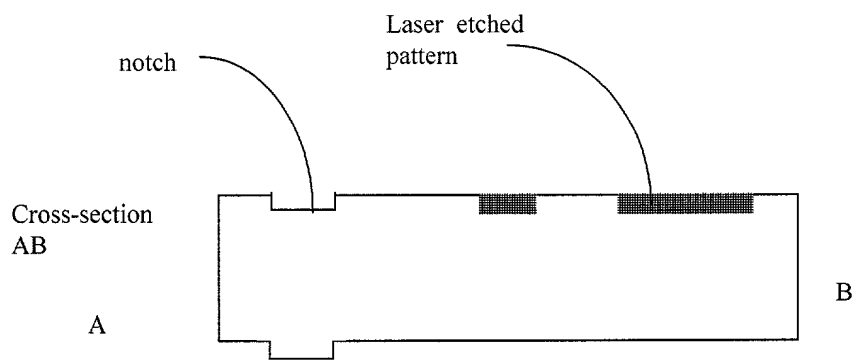
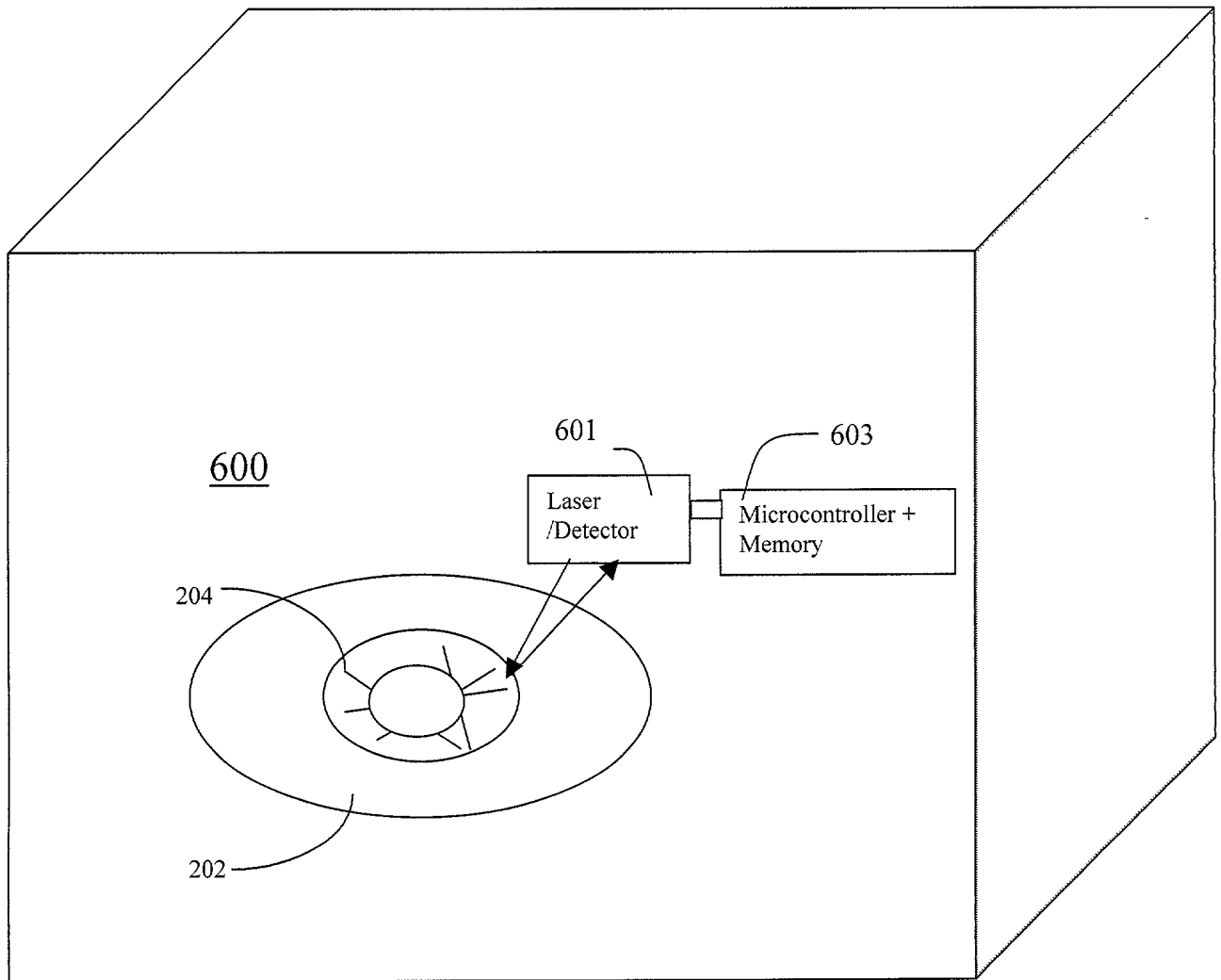


Figure 20C



**FIGURE 21**